

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A rotation driving device for a construction machine comprising an electric motor for driving a rotational system of said construction machine, an operating member for instructing an operation of said electric motor, and a controller for controlling said electric motor according to an operation command from said operating member,

wherein said controller has an emulation model for simulating dynamic characteristics of a hydraulic rotational driving device in real time, and a target value for control is calculated by use of said emulation model according to the operation command from said operating member to control said electric motor.

Claim 2 (Currently Amended): The rotation driving device for the construction machine according to claim 1, wherein said emulation model ~~individually has specifications of includes~~ a hydraulic pump, a hydraulic actuator and ~~various a plurality of hydraulic valves as hydraulic equipment.~~

Claim 3 (Currently Amended): The rotation driving device for the construction machine according to claim 2, wherein an input unit is connected to said controller, so that ~~each of said specifications in~~ said emulation model is changed through said input unit.

Claim 4 (Currently Amended): The rotation driving device for the construction machine according to claim 2, wherein said emulation model has nonlinear characteristic of a flow control valve or pressure control valve as said plurality of valves valve.

Claim 5 (Original): The rotation driving device for the construction machine according to claim 1, wherein either one or two or more of an external power source, a built-in battery, a generator driven by an engine and a capacitor are selected as a power source of said electric motor.

Claim 6 (Original): The rotation driving device for the construction machine according to claim 1, wherein said rotational system includes at least one of a rotating system having a rotating motor as driving source, a hoisting system with a winch motor as driving source, and a traveling system with a traveling motor as driving source.